REMARKS

A. Status of Application

Applicants have reviewed and amended the Specification to correct minor typographical errors. No new matter was introduced. Claims 18-66 are pending. Claims 21-23, 26, 28, 33, 44, 45, 48, 50, and 55 have been canceled, claims 18, 19, 27, 29-32, 41, 42, 49, 51-54, 65, and 66 have been amended, and claims 67-70 have been added. Claims 18, 19, 20, 24, 25, 27, 29-32, 34-43, 46, 47, 49, 51-54, 56-70 remain in this application and are presented for reconsideration.

B. Section 103 Rejection

Claims 18-66 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Published Patent Application No. 2003/0083756 to Hsiung *et al.* In light of the above claim amendments and the following remarks, Applicants respectfully traverse this rejection.

The Hsiung reference is directed towards techniques for processing information or data over a network of computers. *See* page 1, paragraph 7. In one respect, the status of a system is modeled. *See* page 20, paragraph 352. Particularly, the models are "simple collections of individual sensors, or complex collections of sensor, other models, and virtual sensors...they use raw sensor data to determine if the system is in or out of control, and provide that information to Monitors in the form of control charts and alarms." (Page 20, paragraph 352). The models provided by the Hsiung reference does not represent a problem, but rather appear to detect for problems.

In contrast, referring to, for example, page 18, lines 6-8 of the Specification, a problem is modeled as "an interaction graph between discrete variables represented as variables nodes (VN) to which constraints represented as functions nodes (FN) are linked. The discrete variables are variables that take values in a finite number of possible states." Independent claim 18 has been amended and now recites, in part:

> ...a memory storing a problem; a processor coupled to the memory, the processor comprising: means for constructing a data structure representative of the problem, the data structure comprising constrained discrete variables of the problem and constraints of the variables, each variable having a referenced set of possible states;

> means for delivering messages between a variable of the variables and at least one constraint of the variable, the messages comprising a message containing a set of probabilities for various patterns of warning for the variable, a warning giving information on whether the various assignments from the set of possible states of the variable are compatible with the constraints involving the variable...

Claims 41 and 66 have been amended to recite a similar limitation. Support for the amendments may be found, for example, on page 4, lines 23-30 or page 18, lines 1 through 8.

The Hsiung reference fails to disclose all the limitations of claims 18, 41, and 66. In particular, Hsiung does not construct a data structure representative of the problem, but rather appears to model a system to detect a problem. Additionally, the alarms of the Hsiung reference can not be construed as a warning as recited by independent claims 18, 41, and 66. The warning gives "information on whether the various assignments from the set of possible states of the variable are compatible with the constraints involving the variable." The alarms of the Hsiung reference appears to alert a Monitor of the status of the system. For at least these reasons, claims 18, 41, and 66, and their respective dependent claims, are patentable over Hsiung. Removal of the § 103 rejection is respectfully requested.

Additionally, the Office states that the Microsoft Excel software, used in the Hsiung reference, or in general, includes "problem solving capabilities responsive to variables in the form of....constructed data structures held in memory...includes both graphing and listing capabilities...displays 'warning' messages when a variable is not within acceptable range, ...produces appropriate 'warning' messages for specific 'unacceptable' condition...[and] can be configure to return integer values." (Office Action mailed 3/14/05, page 3). The Office has failed to point specific passages within the Hsiung reference, other published references, or by an Examiner's affidavit to support the alleged functionality of the cited software, as required by M.P.E.P. § 2144.03. It appears that the Office is seeking to employ a conclusory statement that the recited features are *per se* obvious because, in the Office's unsupported opinion, those features are obvious design choices. Rejections of this type, based at most on impermissible hindsight, do not even approach a *prima facie* showing of obviousness. M.P.E.P. § 2143 (setting forth the requirements of a *prima facie* showing of obviousness). Accordingly, the current rejection cannot stand and should be removed to allow the pending claims to issue.

C. Claims 67-70

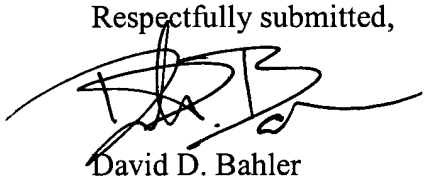
Newly added claim 67 and 68 are dependent claims of claim 18 and claims 69 and 70 are dependent claims of claim 41. Support for claim 67-70 may be found, for example, on page 5, lines 9 through page 10, line 14. Claims 67-70 are patentably distinct over the cited reference for at least the same reasons given for independent claims 18 and 41.

CONCLUSION

Applicants believe the foregoing to be a full and complete response to the subject Office Action, and respectfully request the withdrawal of the rejections to claims 18, 19, 20, 24, 25, 27, 29-32, 34-43, 46, 47, 49, 51-54, 56-70, the allowance of these claims, and the issuance of a timely Notice of Allowance.

Should the Examiner believe that a personal discussion would be helpful, he is encouraged to contact the undersigned attorney at 512/536-3005 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,



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